Arboricultural Impact Assessment

Arches 29-41 Castle Mews
Castle Road, London, NW1 8SY

March 2025

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10/03/2025

Harriet Humphrey

Montagu Evans

70 St Mary Axe London, EC3A 8BE

Document Control:

Project no.	Project
13111	Arches 29-41 Castle Mews

Version:	Written by:	Checked by:	Authorised by:	Date
Rev0	Nick Hollett	Pete Davies	Richard Schofield	10 March 2025

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Phlorum Limited

Southern Office: Unit 12, Hunns Mere Way, Brighton, BN2 6AH

T: 01273 307 1670 E: info@phlorum.com W: www.phlorum.com

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Executive Summary

Phlorum has been instructed by Montagu Evans to provide an arboricultural impact assessment and arboricultural method statement to support a planning application for the partial demolition of existing warehouse, refurbishment / extension of existing warehouse, external alterations to existing railway arches and associated works related to the continued use of the site as a builders' merchant (Sui Generis), and / or Class B8 (Storage and Distribution) and / or Class E(g)(iii) (Light Industrial) use.

This report complies with the planning policies of London Borough of Camden and complies with the recommendations of British Standard BS5837: 2012 Trees in relation to design, demolition and construction – Recommendations.

The tree survey was carried out on 18th February 2025. The tree constraints plan and tree survey schedule can be found at Appendix A and Appendix B respectively.

- No tree preservation order protects trees at this site. However, the southern section of the site is located within the Harmood Street Conservation Area.
- The proposed layout has been overlaid with the tree constraints plan in order to identify the impacts to the trees to inform this impact assessment and this information has formed the basis of the root protection area incursions plan at Appendix C and the tree protection plan at Appendix D.
- No trees require removal to facilitate the proposals.
- Access facilitation pruning will be required to the crown of T8. The crown of T8 will require crown lifting to 5m in height on the south and east aspect. It may be necessary to remove the ivy from G14 and prune back the elder within G1 from the external warehouse wall and within the guttering. The pruning specification is required to provide sufficient space for the dismantling and reconstruction of the warehouse wall and to allow for selective wall repair works and the installation of replacement guttering.
- New column foundation pads and replacement wall foundations are to be located within the root protection areas of G1-T9. Sympathetic construction methodologies described in this report must be implemented to avoid significant root damage.
- The existing warehouse internal and external concrete surface may require localised replacing/repairing. This must be undertaken sensitively as described in the arboricultural method statement.
- Provided the exclusion zones and methodologies described in the arboricultural method statement at section 5 and tree protection plan are followed, trees proposed for retention can be protected during the construction phase and successfully integrated into the site post development.

1. Introduction

Instruction

1.1 Phlorum has been instructed by Montagu Evans to provide an arboricultural impact assessment and arboricultural method statement to support a planning application for the partial demolition of existing warehouse, refurbishment / extension of existing warehouse, external alterations to existing railway arches and associated works related to the continued use of the site as a builders' merchant (Sui Generis), and / or Class B8 (Storage and Distribution) and / or Class E(g)(iii) (Light Industrial) use.

1.2 This report complies with the planning policies of London Borough of Camden and complies with the recommendations of British Standard BS5837: 2012 Trees in relation to design, demolition and construction – Recommendations (the British Standard).

Relevant planning history

1.3 The site has previously been granted planning permission ref: 2024/2921/P for the demolition of infills to 3 x arches at Arches 29-31 Castle Mews, London, NW1 8SY. The planning application was granted approval on 12/08/2024. Details/documents and demolition methodology related to the works can be found on the London Borough of Camden online planning portal. The approved work had been completed prior to this tree survey being undertaken.

Objectives of report

1.4 This report has been undertaken with the following objectives:

- To survey all trees within and adjacent to the site with trunk diameters of 75mm or more at a height of 1.5m.
- To assess the quality and value of the existing tree stock in terms of arboricultural, landscape, historical/conservation, or public amenity value.
- To provide information relating to planning constraints that may restrict works to trees at the site.
- To identify the tree removals and pruning works that will be required as a result of the proposed development and to assess the impact of the tree works.
- To assess the potential impact the proposed construction works will have on retained trees and provide recommendations for mitigation measures to reduce the impact on the trees.

- To provide a protection methodology for retained trees throughout the demolition and construction period, including the above ground and below ground parts of the trees as well as their rooting medium.

Contents of report

1.5 This report includes following objectives:

- A tree constraints plan and tree survey schedule at Appendices A & B respectively.
- An arboricultural impact assessment at section 2, a root protection area incursions plan at Appendix C.
- An arboricultural method statement at section 3 and a tree protection plan at Appendix D.

Documents and information provided

1.6 The following documents were used to aid the preparation of this report:

- Robinson Kenning & Gallagher – Site Location Plan and Existing Site Survey Plan ref: 23-4758-PD-001 Rev: B.
- Robinson Kenning & Gallagher – Proposed Plan ref: 23-47580-PD-010 Rev: H.
- Integrum – Site Investigation Report ref: 1825.
- Supplied – Typical Detailed Foundation Section.

Limitations of report

1.7 The following arboricultural impact assessment and method statement have been prepared for the proposal stated in section 2.1 and using the plans and information listed in section 2.6. The report should not be relied upon if the stated proposal or proposed design changes unless the author confirms the changes do not have a bearing on the arboricultural impacts or recommended mitigation measures.

1.8 The survey methodology was restricted to a visual tree assessment from ground level. No tree climbing or invasive ground investigation was carried out for this report. Where existing site constraints are present such as ivy-covered trees, a very dense under-storey, or where trees are located on third party land to which access was not granted, tree dimensions were estimated by eye as accurately as possible.

1.9 The tree survey represents a preliminary overview of the condition and value of trees at the site. It is not a detailed assessment of any individual tree and although management recommendations are included, this report will not be sufficient to be used as a detailed condition and safety survey.

1.10 The information and measurements in this report are representative of the date of the site visit. The tree survey data will need to be updated to reflect tree growth and changes in the condition of the trees after prolonged periods.

1.11 A topographical survey with measured tree positions was provided but only covered two of the trees surveyed for this report. The remaining tree positions were approximately plotted and annotated (PA) during the site visit and so must not be scaled from for detailed design purposes.

2. Initial Tree Survey

Tree survey information

2.1 The following information was recorded in the tree survey schedule for each individual tree (average dimensions are recorded for groups):

- Tree reference number. (T=tree, G=group). Tree numbers suffixed with PA on the tree constraints plan indicate that the tree position is approximate.
- Species (common and scientific name).
- Overall tree height (m).
- Stem diameter (mm) per stem or average diameter for multi-stemmed trees with six or more stems.
- Branch spread (m) measured to the four cardinal points.
- Existing height (m) above ground level of lowest significant branch and direction of growth (for individual trees only).
- Existing height (m) above ground level of canopy.
- Age class (young, semi mature, early mature, mature, over mature or veteran).
- Physiological condition (good, fair, poor).
- Structural condition (good, fair, poor).
- Comments (general description of tree(s) including any notable features).
- Tree categorisation (see below).
- Root protection area (m^2).
- Root protection radius (m).

Tree categorisation

2.2 The condition and value of each tree was evaluated based on the current land use. Each tree or tree group has been awarded either category A, B, C or U and a subcategory of either 1,2 or 3 or a combination of the subcategories.

Tree categorisation summary:

- A – Trees of good condition and high arboricultural, landscape or conservation value. Must have a potential life span in excess of forty years.
- B – Trees of moderate condition, with minor defects or sub-optimal form but are still of modest arboricultural, landscape or conservation value. Must have a potential life span in excess of twenty years.

- C – Unremarkable trees of poor condition or form with limited arboricultural, landscape or conservation value, or trees with a stem diameter under 150mm. Must have a potential life span in excess of ten years.
- U – Trees of such impaired condition that they cannot realistically be retained as living trees in the context of the current land use for more than ten years. These trees do not need to be removed if they are not dangerous and do not conflict with the proposed development but should not be considered a constraint to development.

Tree sub categorisation summary:

- 1 – Trees have mainly arboricultural value, e.g. trees of good condition, form and vitality or rare tree species.
- 2 – Trees have mainly landscape value, e.g. trees of landscape prominence, that serve to screen unsightly views or that are required for privacy. Also trees present in groups that attain higher collective rating that they would as individuals.
- 3 – Trees with mainly cultural value including conservation, e.g. commemorative trees, trees of historical significance or veteran trees.

2.3 Each tree can only be categorised as A, B or C but may comply with more than one subcategory.

Root protection areas

2.4 A root protection area represents a calculation of the minimum volume of rooting medium required to support a tree. It is a standardised calculation based on the stem diameter(s) measured at 1.5m and is not necessarily representative of the actual root spread or total rooting area of a tree. The formulas used to calculate root protection areas are shown below:

Table 1: Root protection area formulas

Number of stems	Root protection area formula
Single stemmed trees	$\frac{(\text{stem diameter (mm)} \times 12)^2 \times \pi}{1000}$
Trees with two to five stems	$\sqrt{(\text{stem diameter 1})^2 + (\text{stem diameter 2})^2 \ldots + (\text{stem diameter 5})^2}$
Trees with more than five stems	$\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$

2.5 The root protection areas are plotted onto the tree constraints plan in Appendix A and are recorded in the tree survey schedule in Appendix B. These are represented as a circle on the plan (unless significant rooting constraints are present), and are colour coded depending on the category the tree has been awarded. Where existing site conditions/features are present that are deemed likely to have affected the root morphology, the root protection areas have been represented as a polygon of equivalent area.

2.6 The disturbance of a tree's root system can result in crown dieback and even death of the tree. Roots are used to support the tree structurally as well as the absorption of moisture and nutrients from the soil. They also act as storage and transport for water and nutrients. It is therefore important to protect roots and their ability to function during the construction period and post development.

2.7 The majority of root growth is usually found within the top 600mm of soil. As such, even a shallow disturbance within a root protection area can potentially have a significant impact on the tree.

Site visit

2.8 A site visit was carried out on 18th February 2025. The weather conditions at the time were dry and overcast. The visibility was adequate for visual tree inspection from ground level. Deciduous trees were not in leaf.

Site layout

2.9 The site is located at the western end of Castle Street at the junction with Castle Mews. The site is comprised of a commercial premisses located within the 12 x archways of a railway line extending from north to south. The northern section of the site has an external yard area, and the southern section is covered by a pitched roof. The surrounding land use consists of residential properties and Camden Centre for Learning Special School.

Findings

2.10 A total of twelve trees and two tree groups were surveyed. Their locations are shown on the tree constraints plan at Appendix A and details and measurements are shown in the tree survey schedule at Appendix B.

Table 2: Tree Categorisation Summary

Categorisation	Individual Tree	Tree Group
A	1	-
B	4	-
C	6	2

Categorisation	Individual Tree	Tree Group
U	1	-
Total	12	2

Statutory tree protection

2.11 London Borough of Camden Planning Department was contacted by email to establish whether any tree preservation order (TPO) protects the trees at this site. It was reported on 22/02/2025 that no TPO protects the trees on this site.

2.12 However, the southern section of the site is located within the Harmood Street Conservation Area therefore all trees are automatically protected and no works to trees should be carried out unless either the works are approved under a planning permission, or a six week notice to the Council has been provided. Failure to adhere to the Conservation Area legislation could lead to prosecution and if convicted a fine and criminal record. The crown of a tree and its roots are protected. The person carrying out the works, the person instructing the works and the Directors of that company are potentially liable.

2.13 The extent of the Harmood Conservation area can be seen in figure 1 below.

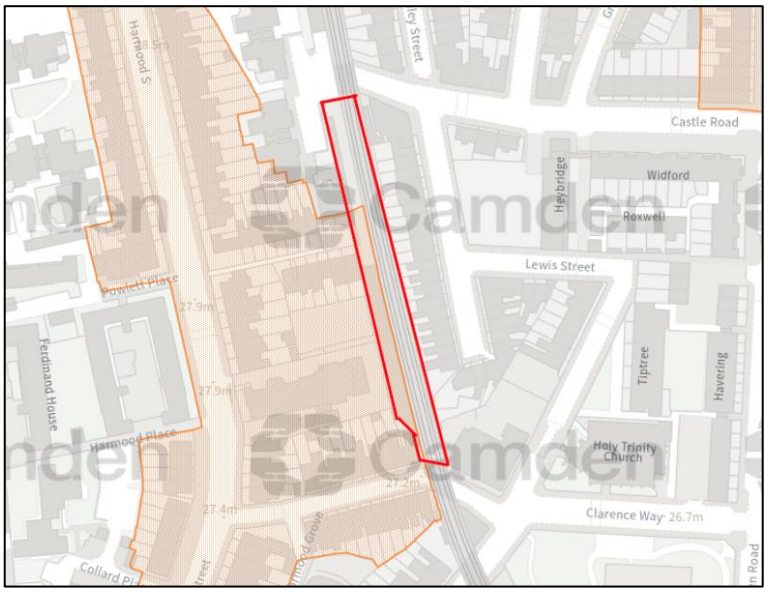


Figure 1: Harmood Conservation Area in Orange - site outlined in red – (Copyright London Borough of Camden online mapping service 2025).

3. Arboricultural Impact Assessment

Tree proposals

3.1 The proposed layout has been overlaid with the tree constraints plan in order to identify the impacts to the trees to inform this impact assessment and this information has formed the basis of the root protection area incursions plan at Appendix C and the tree protection plan at Appendix D.

Tree works

3.2 No trees require removal to facilitate the proposals.

3.3 Access facilitation pruning will be required to the crown of T8. The crown of T8 will require crown lifting to 5m in height on the south and east aspect. The pruning specification is required to provide sufficient space for the dismantling and reconstruction of the warehouse wall and associated works.

3.4 It may be necessary to remove the ivy from G14 and prune back the elder within G1 from the external warehouse wall and within the guttering to allow for selective wall repair works and the installation of replacement guttering.

3.5 The majority of the tree stock has recently been heavily reduced resulting in little to no crowns as shown in figures 2 and 3. Therefore, it is anticipated that the crowns of all reduced trees will be located a sufficient distance from proposed construction activities as not to require further pruning.

Figure 2: Reduced crowns of G1-T7.

Figure 3: Reduced crowns of T10-T12.

3.6 All tree works are to be carried out in accordance with BS3998: 2010 Tree works – Recommendations.

3.7 Any requirements for pruning that cannot be predicted at this stage in the design process (e.g. for contractor compound or movement of large or specialist plant machinery) shall be discussed at the pre-commencement meeting with the project arboriculturist and agreed with the local authority arboricultural officer. No works may be carried out on trees located within a conservation area unless either the works are approved under a planning permission, or a six week notice to the Council has been provided

Building footings in proximity to G1-T9

3.8 New column foundation pads and replacement wall foundations are to be located within the root protection areas of G1-T9. Site investigation works have previously been undertaken to establish the extent of the existing foundation and slab details. A site investigation report has been provided by Integrum Site Services ref: 1825. The investigation comprised of 21 No. trail pits and 2 No. boreholes. Details of the results can be found within the report. Locations for the trail pits can be seen within figure 4 below.

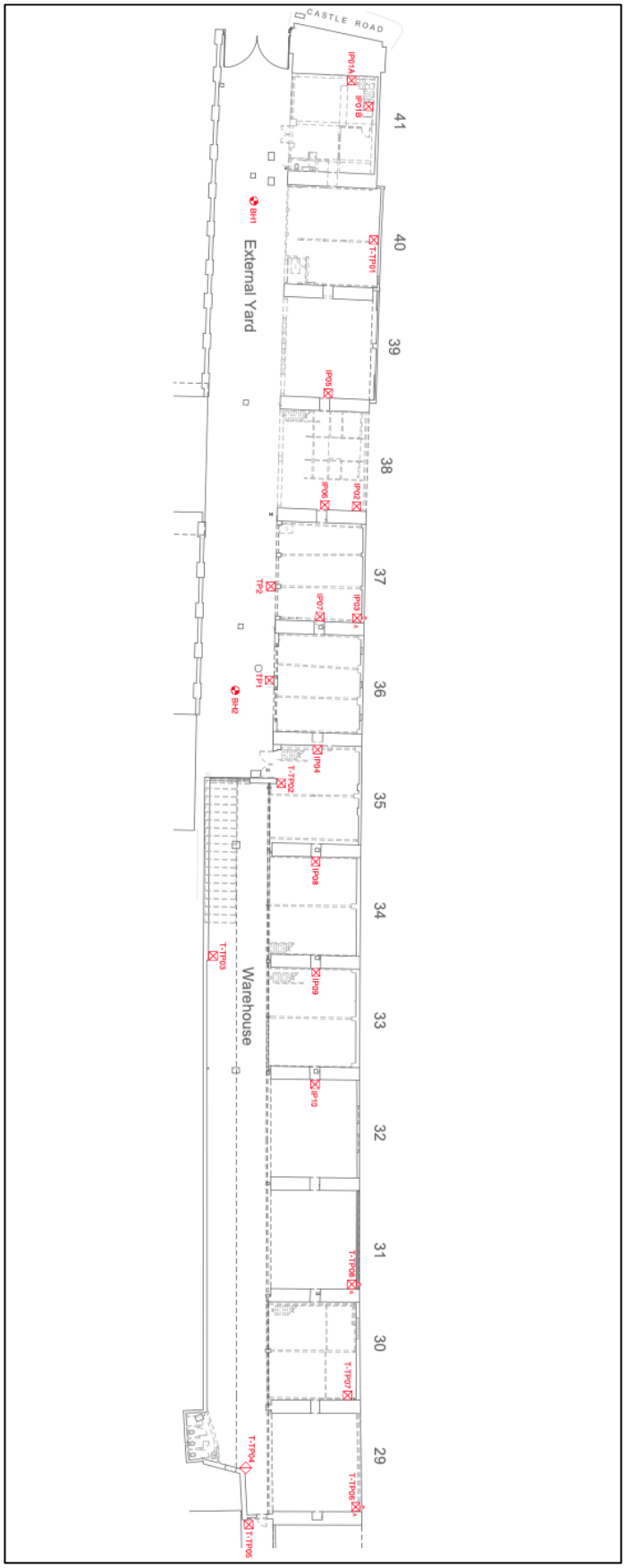


Figure 4: Location of trail pits.

3.9 New columns are to be constructed to provide support for the warehouse roof. The new columns will require pad foundations. These will be located within the root protection areas of G1-T8 in the areas hatched pink on the root protection area incursions plan. Trail hole T-TP03 was excavated to establish the depth of the wall footings adjacent to G1-T7 in the location shown in figure 4. It was reported that the depth of the foundation was 1020mm before virgin ground was detected as shown in figure 5. The report also detailed that root invasion was present from 300mm to 1020mm within the trail pit. However, no DNA root testing was carried out to confirm that roots extended from G1-T7. It was communicated that the extent of the new pad foundations formation level will extend down to the depth of the virgin ground and not beyond. However, the depth of the pad foundations will be confirmed by building control and the structural engineer prior to construction. The typical example of the proposed detailed foundation design has been provided and can be seen in figure 8.

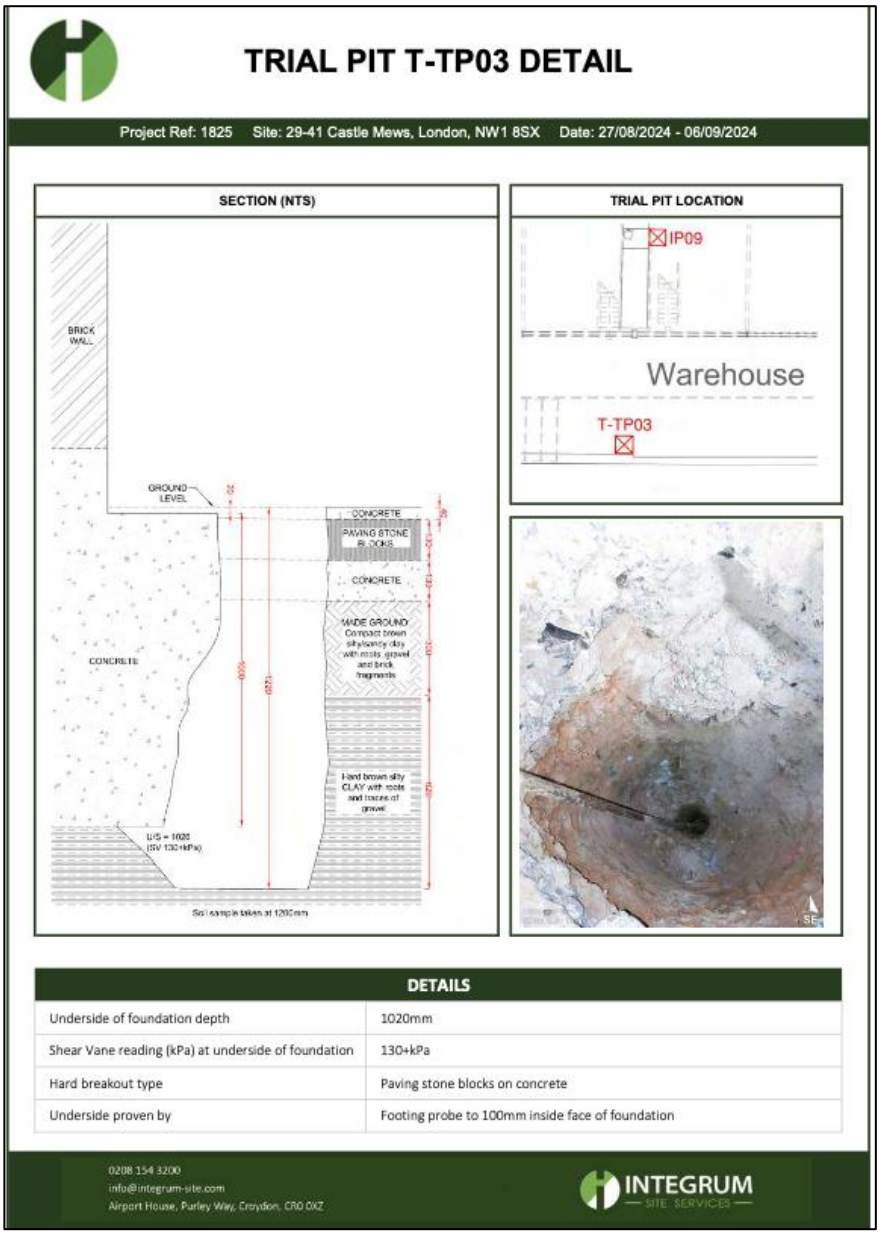


Figure 5: Trail hole T-TP03 findings.

3.10 The existing southern section of the warehouse wall is proposed to be dismantled and a new insulated cavity wall constructed in the same location. A section of the existing wall and foundations to be replaced is located within the root protection area of T8 in the area hatched cyan on the root protection area incursions plan.

3.11 Trial hole T-TP04 was excavated to establish the depth of the wall foundations in the location shown in figure 4. It was reported that the depth of the foundation was 1650mm before virgin ground was detected as shown in figure 6. The existing wall and foundations are to be removed by hand and the new wall and foundations constructed in the same location and to the same depth if feasible. However, the depth of the replacement wall foundations will be confirmed by building control and the structural engineer prior to construction. The typical example of the proposed detailed foundation design has been provided and can be seen in figure 8.

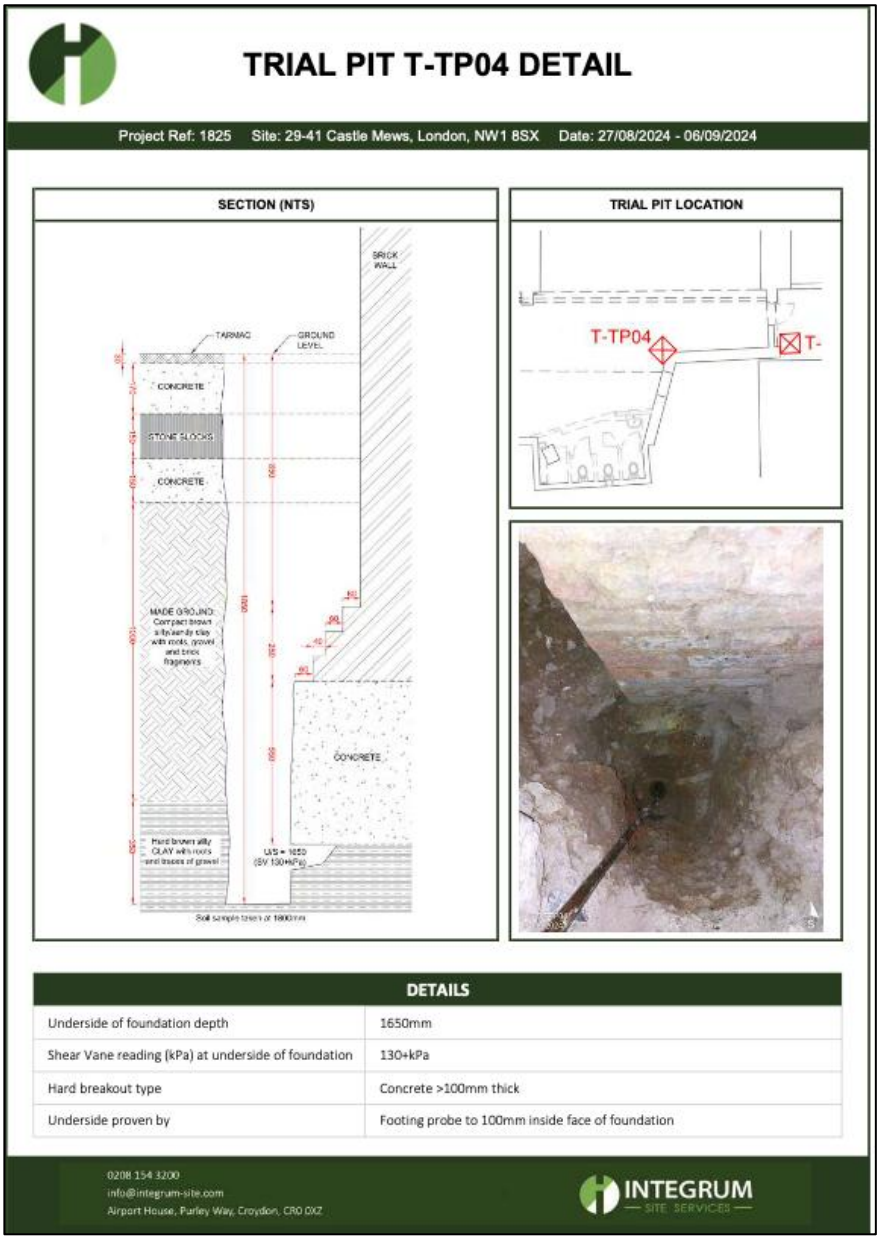


Figure 6: Trail hole T-TP04 findings.

3.12 Replacement arch infill walls are to be constructed within arches 29-31. A section of the replacement wall will be located within the root protection area of T9 in the locations hatched orange on the root protection area incursions plan. The infill walls have been previously dismantled under granted planning permission ref: 2024/2921/P and timber hoarding erected in its place. Details/documents and demolition methodology related to the works can be found on the London Borough of Camden online planning portal.

3.13 Trial hole T-TP06 section B was excavated to establish the depth of the infill wall foundations in the location shown in figure 4. It was reported that the depth of the previously removed arch infill wall foundation was 450mm followed by compact made up ground. Virgin ground was detected at 1250mm as shown in figure 7. The existing foundations are to be removed by hand and the new wall and foundations constructed in the same location. It was communicated that the final formation level will extend down to the depth of the virgin ground and not beyond where feasible. However, the depth of the replacement wall foundations will be confirmed by building control and the structural engineer prior to construction. The typical example of the proposed detailed foundation design has been provided and can be seen in figure 8.

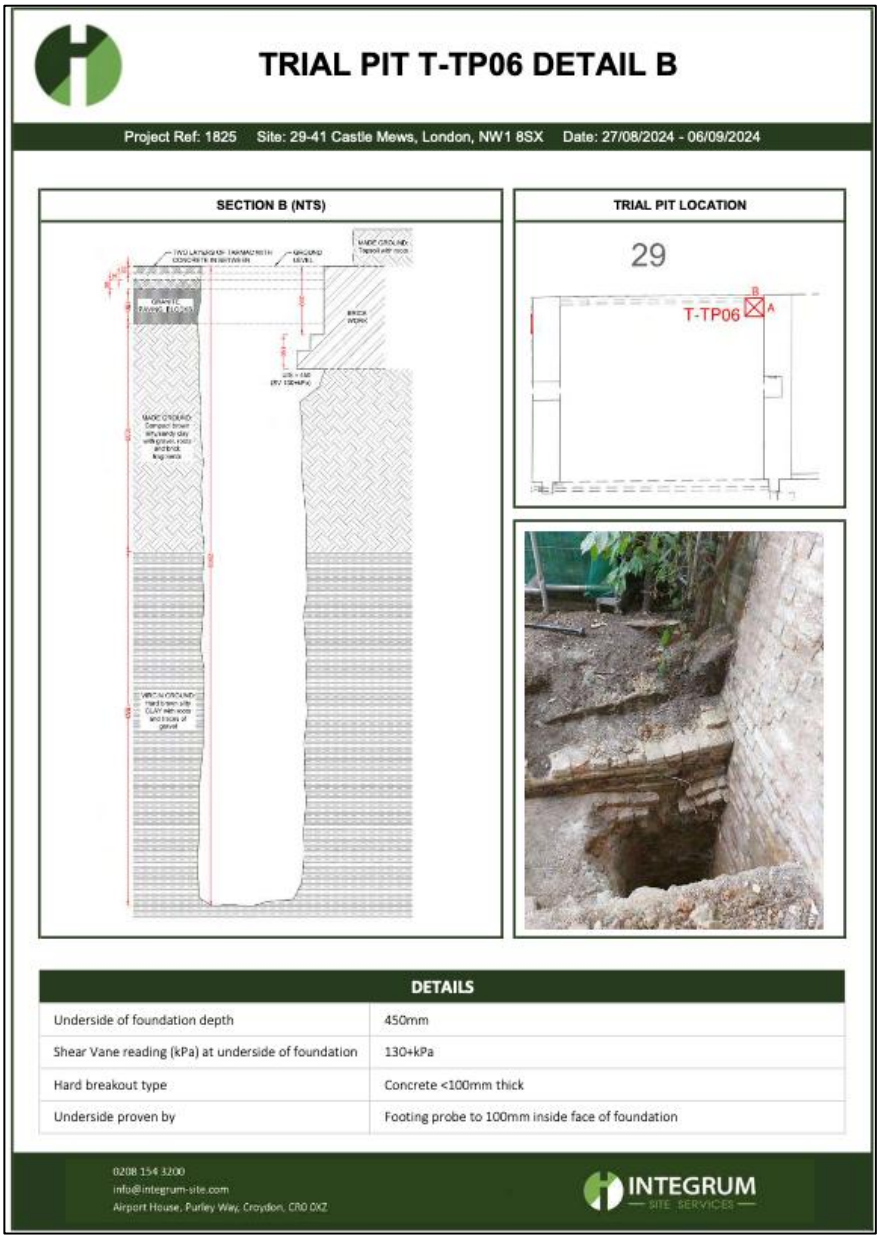


Figure 7: Trail hole T-TP06 section B findings.

3.14 A typical example of the proposed detailed foundation design has been provided and can be seen in figure 8.

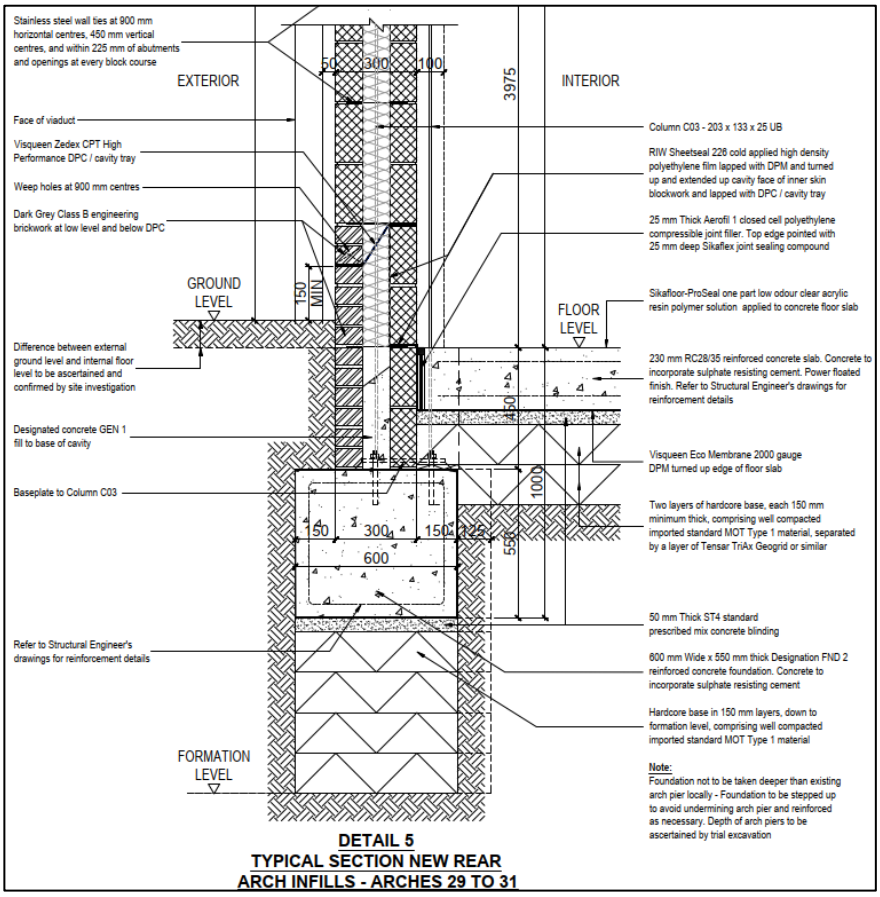


Figure 8: Typical foundation specification.

Hard standing in proximity to trees

3.15 No new hard standing will be constructed within the root protection areas of retained trees, however the existing concrete hard standing in the internal and external warehouse may require replacing/repairing in localised areas within the root protection areas of G1-T12. This must be undertaken carefully as described in the arboricultural method statement.

Services

3.16 Details of the routing of services for the proposals are not currently available. However, it is anticipated that the existing services for the warehouse will be utilised for the proposed refurbishment/extension, therefore no works are expected to be carried out within root protection areas.

3.17 Any new underground services should be located outside the root protection areas of retained trees and above ground services should be located outside the anticipated mature crown spreads. Sympathetic methodology to enable the installation of services within root protection areas (in certain instances) is available, however there will always be a potential arboricultural impact and arboricultural advice must be sought regarding the suitability of these methods before they are relied upon. If it is achievable, root protection areas should always be completely avoided.

3.18 Once details of the routing of new services (if any) become available, prior to commencement, these shall be reviewed by the project arboriculturist. The arboriculturist shall then confirm either that no works will be carried out within root protection areas or provide details of the methodology required to ensure the works are carried out in accordance with NJUG4 'Guidelines for the planning, installation and maintenance of utilities in proximity to trees' and BS5837: 2012.

4. Arboricultural Method Statement

General requirements

4.1 The arboricultural method statement and tree protection plan shall remain on site for the duration of demolition and construction works and be available to site operatives at all times. All operatives at the site shall be briefed about tree related factors as part of their site induction.

4.2 Any variation from the methodology described in this method statement shall be discussed with the supervising arboriculturist and agreed with the local authority arboricultural officer.

Phasing of works

4.3 To ensure trees are protected throughout the development, the proposed development shall occur in the following order:

Table 3: Works order

Works order	Operation	Notes
1	Initial tree works.	The tree works contractor shall undertake the access facilitation pruning specified in the arboricultural impact assessment.
2	Installation of tree protection barriers.	Tree protection fencing and temporary ground protection shall be installed in the locations shown on the tree protection plan and to the specification described in this method statement.
3	Pre-commencement meeting.	The project arboriculturist shall attend a site meeting with the site manager. The local authority arboricultural officer shall be notified so they may also attend. The above pre-start arboricultural works shall be signed off by the project arboriculturist during the meeting. The meeting shall occur before any plant activity, ground works or demolition/construction activities begin.

Works order	Operation	Notes
4	Demolition phase.	The tree protection barriers shall be maintained, and the construction exclusion zones observed throughout the demolition phase. The southern section of warehouse wall shall be dismantled sensitively from adjacent T8 as described in this method statement.
5	Construction phase.	The tree protection barriers shall be maintained, and the construction exclusion zones observed throughout the construction phase. New and replacement foundations shall be constructed sensitively within the root protection areas of G1-T9 as described in this method statement.
6	Removal of tree protection barriers.	The tree protection barriers shall be dismantled when external construction and hard landscape operations have been completed and plant machinery or excess construction materials have been removed from site.

Initial tree works

4.4 The access facilitation pruning specified in the arboricultural impact assessment shall be carried out as the first stage of development. Any requirements for access facilitation pruning which have not been anticipated on the date of this report shall be discussed at the pre-commencement meeting with the project arboriculturist and be communicated to the local authority arboricultural officer.

4.5 Trees should be checked for protected species before works are undertaken. It is against the law to disturb bats or their roosts under the Conservation of Habitat and Species Regulations. Nesting birds are protected by the Wildlife and Countryside Act. If protected species are discovered, Natural England should be contacted for advice.

4.6 The tree works contractors should carry out all tree works to BS3998: 2010 Tree works – recommendations as modified by research that is more recent. They should also carry relevant, adequate and up to date insurance.

4.7 It is suggested that an Arboricultural Association approved contractor carry out all tree works. Approved contractors are expected to work to industry best standards. The Arboricultural Association website (www.trees.org.uk) contains contact details and information on engaging a suitable contractor.

Tree protection barriers

4.8 The root protection areas of retained trees must be left free from disturbance, and protected from contamination or compaction during the proposed works. Protection shall comprise a combination of tree protection fencing and temporary ground protection.

4.9 The tree protection fencing and temporary ground protection shall be installed and signed off by the project arboriculturist before any plant activity, ground works or demolition/construction activities commence at the site. They shall be maintained in situ until the completion of development when all other construction activities in the vicinity have been completed, and excess construction materials and plant machinery have been removed from site. Any damage that occurs to the tree protection barriers during the construction period must be rectified immediately, prior to other construction activities recommencing in the vicinity.

4.10 The specification for tree protection fencing shall be metal welded mesh panels (e.g. Heras panels), in concrete or rubber feet. The panels shall be supported by metal stabiliser struts mounted on either a base plate secured by ground pins, or in a block tray (refer to tree protection plan at Appendix D). Any variation from this specification for tree protection fencing shall be discussed with the project arboriculturist and agreed in writing with the local authority arboricultural officer. Tree protection fencing shall be fitted with knitted high density polyethylene acoustic dust screening (or similar) to reduce adverse impact from noise and dust pollution to T8 and T9 during demolition and construction activities.

4.11 Signs shall be affixed to the fencing as shown on the tree protection plan at Appendix D to explain its purpose. The signs shall be affixed at a reasonable size and frequency to ensure they are easily visible to operatives at the site.

4.12 To create a usable workspace between the replacement walls and T8 and T9, temporary ground protection shall be installed in the locations shown on the tree protection plan. The specification for ground protection shall be interlocking proprietary ground protection boards (e.g. IsoTrack L Ground Protection Mat or equivalent product signed off by the project arboriculturist) on a compressible layer (150mm woodchip or sharp sand), spread across a geotextile membrane. This specification is designed to support loads of up to 2 tons only. If larger loads need to be supported, a more robust ground protection specification shall be agreed with the project arboriculturist.

4.13 The areas protected by tree protection fencing (highlighted yellow on the tree protection plan) or temporary ground protection shall be referred to as the construction exclusion zones. The following restrictions shall apply within the construction exclusion zones:

- No vehicular access shall be permitted unless on adequate ground protection measures that have been agreed with the project arboriculturist.
- Regular pedestrian access shall be restricted unless on suitable ground protection measures agreed with the project arboriculturist.
- No storage of construction materials shall occur.
- No storage of spoil or construction debris (including short-term temporary storage) shall occur.
- No harmful chemicals shall be stored or handled.
- No fires shall be permitted.
- No mechanical excavation including regrading of levels shall occur.
- There shall be no change in ground level unless undertaken under the supervision of the project arboriculturist.
- No construction activities including installation of new permanent hard standing shall be undertaken unless otherwise specified in this method statement.

4.14 External warehouse wall re-pointing/repairs may be required. To achieve this, it will require access into the construction exclusion zones surrounding G1-T7 and T10-T12. Only pedestrian access will be permitted into the construction exclusion zones and scaffold board pathways shall be used in wet conditions.

Storage and handling of harmful chemicals

4.15 Provision must be taken to prevent the storage and handling of harmful chemicals within the root protection areas of retained trees. Harmful chemicals include fuels, oils, bitumen, builder's sand (which has a high salt content) and cement. Provision shall also be made to prevent the storage and handling of harmful chemicals in areas proposed for further planting if the existing soil is intended to be retained.

4.16 Cement mixing shall always occur outside the construction exclusion zones. If cement mixing is to occur close to the construction exclusion zones, or there is the potential for cement washings to leech into a root protection area, adequate, bunded ground protection measures must be used. This could comprise impermeable plastic sheeting under wooden boards (to prevent tears) surrounded by a raised lip.

4.17 All other chemicals that are harmful to trees must be stowed in suitable containers and stored away from the construction exclusion zones unless adequate, bunded ground protection measures are implemented to prevent spillages leeching into root protection areas.

Contractor facilities

4.18 A suitable location for contractor parking and site facilities for operatives shall be agreed with the project arboriculturist during the pre-commencement meeting if not already specified in a construction management plan that has been signed off by the project arboriculturist. These facilities must be located outside the root protection areas of all retained trees unless on adequate ground protection measures that have been signed off with the project arboriculturist (potentially including existing hard standing).

4.19 Deliveries of construction materials and plant machinery will be made via the existing site access on Castle Mews. Care must be taken when unloading from flatbed lorries close to T13 to avoid damage to the tree crown. As such, a designated banksman must always be utilised to ensure the tree is not contacted when unloading plant machinery, materials or using a vehicle with a hi-ab arm.

Dismantling of existing wall adjacent to T8

4.20 Dismantling of the above ground parts of the wall adjacent to T8 must occur carefully to avoid accidental contact with the tree. The wall shall be dismantled by hand, and debris from the dismantling works must be stockpiled outside the construction exclusion zone.

Replacement wall/footings within root protection areas T8 and T9

4.21 Within the root protection areas of T8 and T9 the existing wall foundations shall be broken up using controlled hand tools (e.g. pneumatic breaker) and removed from the root protection areas by hand under strict arboricultural supervision. Debris from the removal works must not be stockpiled within the root protection areas.

4.22 It is intended that the replacement foundations will be constructed to the same depth as the existing where feasible. However, the depth of the replacement wall foundations will be confirmed by building control and the structural engineer prior to construction.

4.23 Excavation may be required beyond the existing foundation depth to achieve the final formation level. The area between the final foundation level and the final formation level will be built up a hardcore base comprising of compact MOT type 1in 150mm levels as shown in figure 8. Within the root protection area of T8 and T9, all excavation beyond the existing foundation depth shall occur carefully using hand tools or an airspade under arboricultural supervision. Roots revealed under 25mm diameter may be cleanly pruned using secateurs to leave the smallest feasible wounds. Roots over 25mm shall not be pruned unless approved by the supervising arboriculturist. Revealed roots that are to be retained within the hardcore levels shall immediately be wrapped in hessian cloth. This will help protect the delicate root bark during remaining excavation works and help prevent desiccation or frost damage if the excavation is left exposed for prolonged periods. The hessian cloth shall be removed when the trench is backfilled.

4.24 When the trench is backfilled, the backfill should, where possible, include the placement of an inert granular material mixed with topsoil or sharp sand (not builder's sand) around the roots. This should allow the soil to be compacted for resurfacing without damage to the roots securing a local aerated zone enabling the root to survive in the longer term. (This procedure conforms with sympathetic methodologies as described in NJUG4 'Guidelines for the planning, installation and maintenance of utilities in proximity to trees' and BS5837: 2012).

Constructing new pad footings within the root protection areas of G1-T8

4.25 New columns are to be constructed to provide support for the warehouse roof. The new pad footings for the columns will be located within the root protection areas of G1-T8. The excavation in this area shall occur by hand under arboricultural supervision to a depth provided by building control and the structural engineer prior to construction Roots revealed shall be cleanly pruned using secateurs to leave the smallest feasible wound. Small clean pruning wounds require less energy from the tree to heal and reduce the chance of infection by tree pathogens. Roots over 25mm diameter must not be pruned unless approved by the supervising arboriculturist.

Repairing existing surfacing within root protection areas of G1-T12

4.26 The existing concrete surface may require repairing in localised areas. Within the root protection areas, the existing wearing course requiring repair shall be broken up using controlled hand tools (e.g. pneumatic breaker) and removed from the root protection areas by hand.

4.27 The existing sub-base shall be reused (augmented as necessary) for the repaired surface. If it is deemed necessary to remove any of the sub-base to repair the surface, this must occur carefully by hand with extreme care to avoid damaging any tree roots that may be present.

Pre-commencement arboricultural input

4.28 Prior to the commencement of works, arboricultural input will be required for the following aspects of development:

- The construction management plan.
- The routing of new services (if any) including drainage.
- The final detailed foundation specification

4.29 If these aspects of the project have a material impact on the guidance in this method statement, the arboricultural method statement shall be updated and the revised information submitted to the local authority tree officer for approval.

Pre-commencement meeting

4.30 A pre-commencement meeting shall be held between the contractors and the project arboriculturist. The local authority arboricultural officer shall be given reasonable notice of the pre-commencement meeting so they may also attend. The purpose of the pre-commencement meeting shall be:

- To clarify the tree protection methodology with the site manager.
- To explain the implications of the Conservation Area.
- To discuss the chronology and phasing of the project with the site manager.
- To sign off that the pre-commencement tree works have been completed as specified in the arboricultural impact assessment, and to discuss any requirements for any further pruning which had not been anticipated prior to the meeting.
- To sign off that the tree protection fencing and ground protection have been installed in the correct locations and to the agreed specification.
- To agree with the local authority arboricultural officer the type and timings of arboricultural monitoring necessary.

4.31 Following this meeting, if the local authority arboricultural officer has not been able to attend, an email outlining the actions discussed will be sent to the tree officer for approval. If necessary, a revised tree protection plan and method statement will be issued for approval.

Arboricultural supervision

4.32 The project arboriculturist shall supervise:

- all excavation within the root protection areas of trees.
- the pruning of roots over 25mm in diameter if revelled.

- backfilling of excavated trenches where roots are retained to ensure inert granular material mixed with topsoil or sharp sand (not builder's sand) is applied around the roots.

Arboricultural monitoring

4.33 The site manager shall provide a monthly update to the project arboriculturist including photographic evidence that the tree protection barriers are intact and that the construction exclusion zones have been observed.

4.34 In addition to the above, a system and programme of onsite monitoring by the appointed arboricultural consultant shall be agreed with the Local Authority Arboricultural Officer. The form and frequency of site monitoring shall be agreed at the pre-commencement meeting.

Process if an unforeseen issue relating to trees arises

4.35 If significant root growth is disturbed during construction activities that are not within the scope of this report, the work shall cease until the project arboriculturist has been consulted. Roots greater than 25mm in diameter or dense/matted fibrous roots shall be considered significant root growth. It should be remembered that whilst root protection areas are part of industry best practice, tree root growth is influenced by a number of factors and may not conform to expected ideals.

4.36 If at any time during the construction process, damage is inadvertently caused to a tree, the project arboriculturist shall be notified to assess the likely implications and to prescribe potential remedial measures to be implemented. Damage can be in the form of chemical or fuel spillage, mechanical damage to either the above ground parts of the tree or the roots, fire or any other unforeseen circumstance.

4.37 The supervising arboriculturist shall be appointed by the contractor. It will be necessary for the arboriculturist to report to the local planning authority on the outcome of the site visits as well as any unforeseen tree related issues.

Figures and Appendices

Appendix A

Tree Constraints Plan

* Tree categorised in accordance with BS 5837:2012 '*Trees in relation to design, demolition and construction - Recommendations*'.

Tree survey schedule contains further information for each tree.

This drawing should be viewed in colour.

Tree numbers suffixed with PA indicate the tree position is approximate.

Key:

- Root protection area for category A* tree
- Root protection area for category B* tree
- Root protection area for category C* tree
- Root protection area for category U* tree
- Tree canopy

Drawing no: 6788/25/A **Rev:** - **Sheet number:** 1 of 1

Site:

Arches 29-41 Castle Mews
Castle Road
London
NW1 8SY

Drawing title: Tree Constraints Plan

Date drawn: 20/02/202

Scale: 1:200 at A1

Drawn by: NH **Checked by:** PD

phlorum

Appendix B

Tree Survey Schedule

Site: Castle Mews

Survey date: 18th February 2025

Surveyor: N.Hollett

Tree Survey Schedule

Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Management recommendation	Category grading	Root Protection Area (m²)	Root Protection Radius (m)
G1	Mixed (sycamore, elder)	2-6 average	250 average	2-5 average	0 average	Semi mature	Fair	Fair	Sycamore previously topped at 2m. Elder is multi stemmed from base. Elder canopy over roof. Group growing through chain-link fence. No access to trees base due to location behind fence.	Prune elder clear of warehouse wall and guttering.	C2	28.3 average	3.0 average
T2	Sycamore (Acer pseudoplatanus)	11	220 est	N: 3 E: 4 S: 0 W: 1	Crown: 5 west Branch: 4 average	Semi mature	Fair	Poor	Located between chain-link fence and wall. Historically pollarded with small amounts of regrowth. Dual stemmed from 4m with included bark. Stem occluded over chain-link fence. Short potential only due to poor 4m union.	No action required.	U	21.9	2.6
T3	Sycamore (Acer pseudoplatanus)	11	200 est	N: 2 E: 3 S: 0 W: 1	Crown: 4 west Branch: 6 east	Semi mature	Fair	Fair	Located between chain-link fence and wall. Historically pollarded. Stem occluded through chain-link fence. Bark loss and exposed heartwood with minor decay on west side from 3-8m. Limited future potential.	No action required.	C1+2	18.1	2.4
T4	Sycamore (Acer pseudoplatanus)	13	360 est	N: 3 E: 1 S: 2 W: 3	Crown: 7 average Branch: 7 average	Early mature	Fair	Fair	Located between chain-link fence and wall with stem occluding thorough fence. Historically pollarded with small regrowth. Large 1m wound 6m west. Minor deadwood. Minor decay at old pruning wounds.	No action required.	C1+2	58.6	4.3
T5	Sycamore (Acer pseudoplatanus)	14	350 est	N: 2 E: 3 S: 2 W: 2	Crown: 8 average Branch: 8 average	Early mature	Fair	Fair	Located between chain-link fence and wall with stem occluding thorough fence. Historically pollarded. Multi stemmed from 2-3m with compressed union and included bark. Minor decay at old pruning wounds,	No action required.	C1+2	55.4	4.2
T6	Sycamore (Acer pseudoplatanus)	12	200 est	N: 2 E: 2 S: 1 W: 1	Crown: 8 average Branch: 8 average	Semi mature	Fair	Fair	Located between chain-link fence and wall. Historically pollarded with small regrowth. Large wound with bark loss and minor decay west at 4-6m. .	No action required.	C1+2	18.1	2.4

Site: Castle Mews

Survey date: 18th February 2025

Surveyor: N.Hollett

Tree Survey Schedule

Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Management recommendation	Category grading	Root Protection Area (m^2)	Root Protection Radius (m)
T7	Sycamore (Acer pseudoplatanus)	13	280 est	N: 2 E: 2 S: 2 W: 2	Crown: 5 average Branch: 5 average	Semi mature	Fair	Fair	Located between chain-link fence and wall with stem occluding thorough fence. Historically pollarded. Dual stemmed from 5m with included bark. Bark loss and minor decay west at 5-6m. Minor squirrel damage.	No action required.	C1+2	35.5	3.4
T8	Sycamore (Acer pseudoplatanus)	14	450 est	N: 5 E: 6 S: 5 W: 3	Crown: 4 average Branch: 2 west	Mature	Fair	Fair	Located between chain-link fence and wall with limited view. Dual stemmed from 1.5 and 4m with included bark. West stem historically removed at 4m. Crown over trainline. Cavity and bark loss on centre stem and east stem from 3-10m with some occlusion wood growth. Previously crown lifted west. East leaning stem.	Crown lift south and east aspect to provide 5m clearance.	C1+2	91.6	5.4
T9	Cherry (Prunus avium)	15	730	N: 7 E: 6 S: 5 W: 2	Crown: 6 average Branch: 6 average	Mature	Fair	Fair	Third party tree located within garden. Large wound on north stem from base-3m. Historically pollarded with small regrowth.	No action required.	B1+2	241.1	8.8
T10	False acacia (Robinia pseudoacacia)	11	300	N: 3 E: 3 S: 0 W: 0	Crown: N/A Branch: 7 average	Early mature	Fair	N/A	Third party tree located within raised planter. Recently pollarded with no regrowth. North-east leaning stem.	No action required.	B1+2	40.7	3.6
T11	False acacia (Robinia pseudoacacia)	14	560	N: 2 E: 2 S: 2 W: 2	Crown: N/A Branch: 6 average	Mature	Fair	N/A	Third party tree located within raised planter. Recently pollarded with no regrowth. Minor bark inclusion at brunch unions. Bark loss at 7m west limb.	No action required.	B1+2	141.9	6.7

Site: Castle Mews

Survey date: 18th February 2025

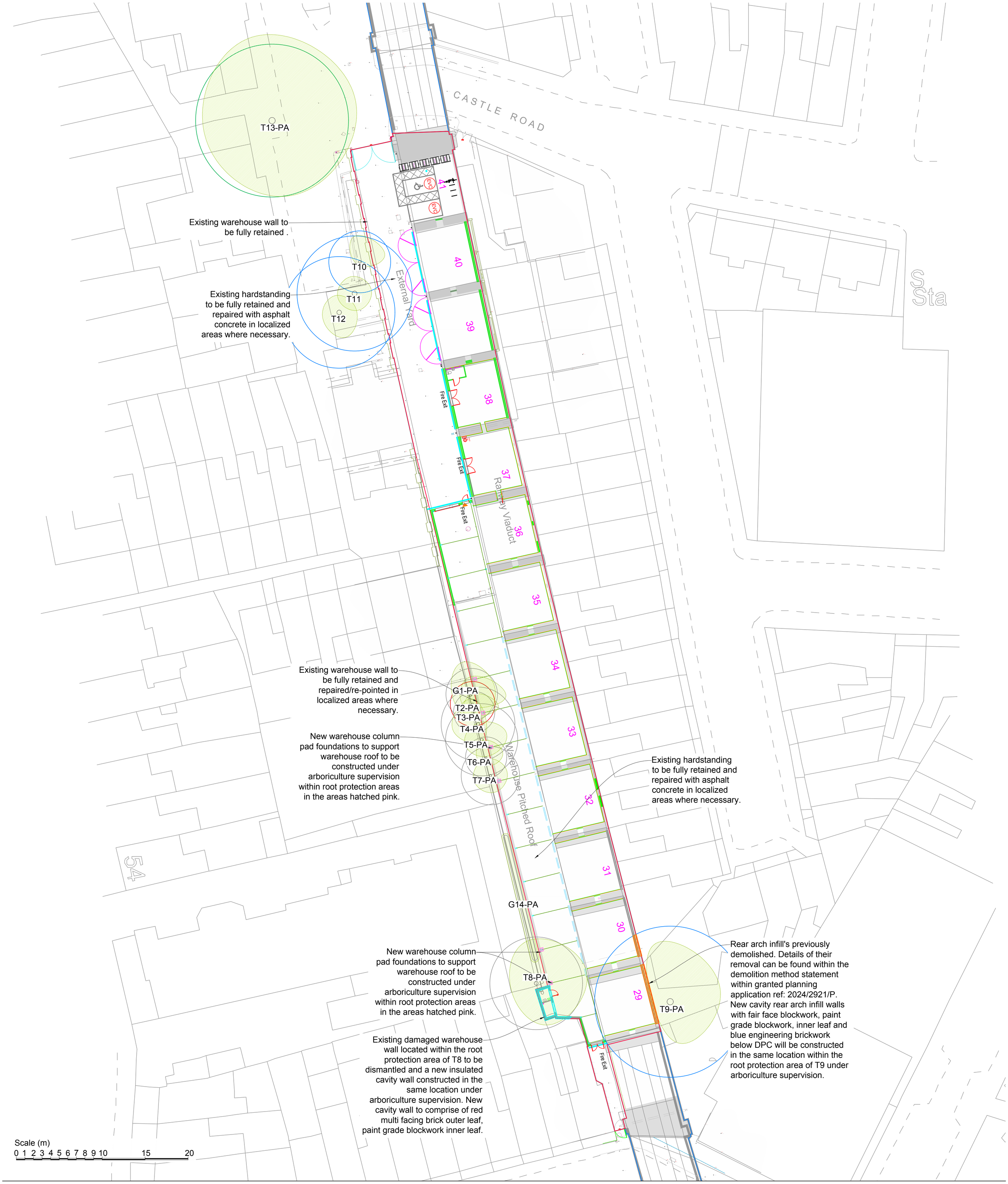
Surveyor: N.Hollett

Tree Survey Schedule

Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Management recommendation	Category grading	Root Protection Area (m²)	Root Protection Radius (m)
T12	False acacia (Robinia pseudoacacia)	15	540	N: 2 E: 2 S: 3 W: 2	Crown: N/A Branch: 6 south	Mature	Fair	N/A	Third party tree located within raised planter. Recently pollarded with no regrowth. Minor bark loss on south primary limb at 6m.	No action required.	B1+2	131.9	6.5
T13	London plane (Platanus x hispanica)	21	740	N: 10 E: 10 S: 9 W: 8	Crown: 2 east Branch: 5 average	Mature	Good	Good	Third party tree located within pavement. Minor pavement lift from roots. Historically pollarded at 11m. Laterally reduced west for building. No major visible defects.	No action required.	A1+2	247.8	8.9
G14	Mixed (ivy, sycamore, elder, buddleia)	1-2 average	Below 75 average	1 average	0 average	Young	Fair	Fair	Mixed self seeded group located between wall and fence. Ivy on building. Pruned west for school. Growing thorough chain-link fence.	Remove ivy from warehouse wall and guttering.	C2	2.5 average	0.9 average

Appendix C

Root Protection Area Incursions Plan



* Tree categorised in accordance with BS 5837:2012 '*Trees in relation to design, demolition and construction - Recommendations*'.

Tree survey schedule contains further information for each tree.

This drawing should be viewed in colour.

Tree numbers suffixed with PA indicate the tree position is approximate.

Key:

- Root protection area for category A* tree to be retained
- Root protection area for category B* tree to be retained
- Root protection area for category C* tree to be retained
- Root protection area for category U* tree to be retained
- Canopy of tree to be retained
- Replacement arch infill wall to be constructed within root protection area
- Existing wall to be dismantled and replaced within root protection area
- New roof column pad footings within root protection areas

Drawing no: 6788/25/B **Rev:** - **Sheet number:** 1 of 1

Site:

Arches 29-41 Castle Mews
Castle Road
London
NW1 8SY

Drawing title: Root Protection Area Incursions Plan

Date drawn: 27/02/202

Scale: 1:200 at A1

Drawn by: NH **Checked by:** PD

phlorum

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Appendix D

Tree Protection Plan

CASTLE ROAD

T13-PA

Existing warehouse wall to provided protection for T10-T12.

Existing hardstanding to provide protection for the root protection areas of T10-T12.

T10

T11

T12

External wall repairs/re-pointing works may be required. This will require access into the construction exclusion zones. Only pedestrian access will be permitted into the construction exclusion zones and scaffold board pathways shall be used in wet conditions.

External Yard

Railway Viaduct

Fire Exit

41 40 39 38 37 36 35 34 33 32 31 30 29

EVC

Existing warehouse wall to provide protection for G1-T7.

G1-PA

T2-PA

T3-PA

T4-PA

T5-PA

T6-PA

T7-PA

New warehouse column pad foundations to support warehouse roof to be constructed within root protection areas in the areas hatched pink.

External wall repairs/re-pointing works may be required. This will require access into the construction exclusion zones. Only pedestrian access will be permitted into the construction exclusion zones and scaffold board pathways shall be used in wet conditions.

Warehouse Pitched Roof

Existing hardstanding to provide protection for the root protection areas of G1-T7.

54

G14-PA

Existing hardstanding to provide protection for the root protection areas of T8 and T9.

Tree protection fencing to be installed to protect T8 during the dismantling of existing wall and construction of new cavity wall.

T8-PA

Tree protection fencing to be installed to provide protection to T9 during the construction of the replacement infill walls.

T9-PA

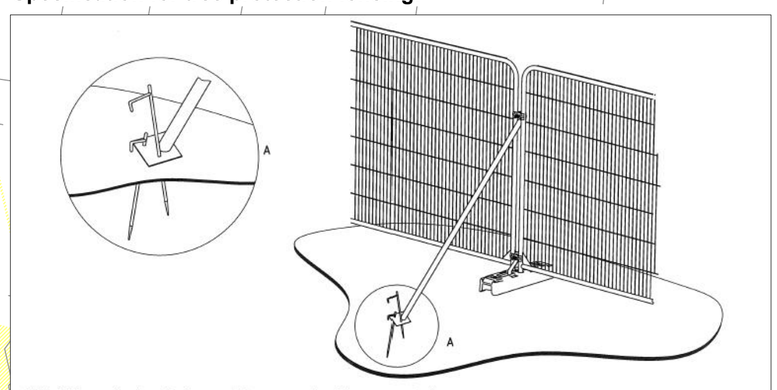
Temporary ground protection to be installed to provide protection to the root protection area of T9 during the construction of the replacement infill wall.

Temporary ground protection to be installed to provide protection to the root protection area of T8 the dismantling of exiting wall and construction of new cavity wall.

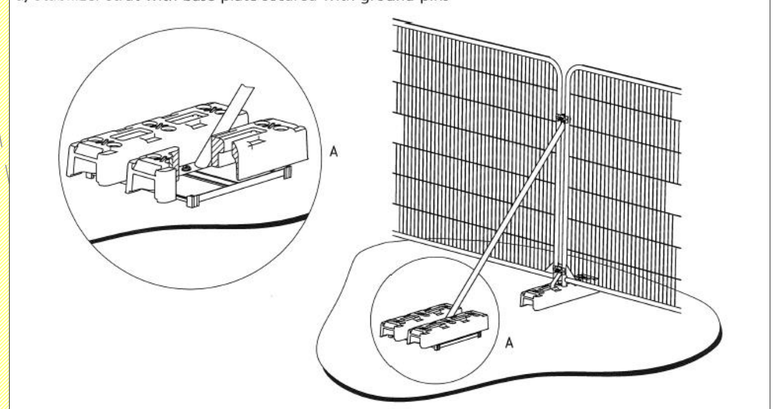
Fire Exit

Scale (m)
0 1 2 3 4 5 6 7 8 9 10 15 20

Specification for tree protection fencing:



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

* Tree categorised in accordance with BS 5837:2012 '*Trees in relation to design, demolition and construction - Recommendations*'.

Tree survey schedule contains further information for each tree.

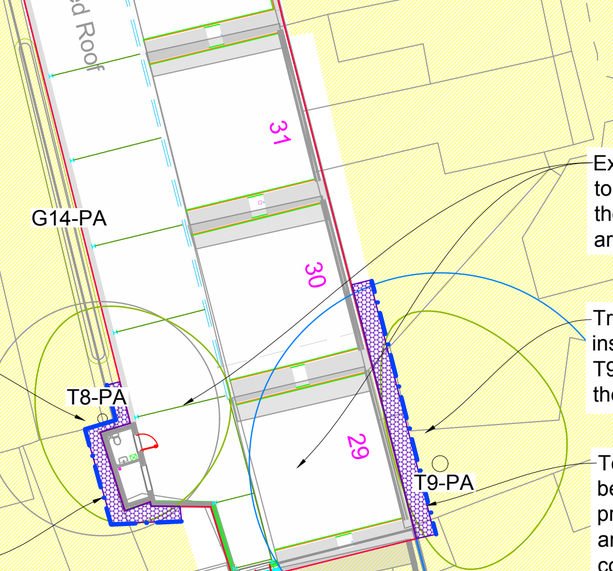
This drawing should be viewed in colour.

Tree numbers suffixed with PA indicate the tree position is approximate.

Key:

- Root protection area for category A* tree to be retained
- Root protection area for category B* tree to be retained
- Root protection area for category C* tree to be retained
- Root protection area for category U* tree to be retained
- Canopy of tree to be retained
- Replacement arch infill wall to be constructed within root protection area
- Existing wall to be dismantled and replaced within root protection areas
- New roof column pad footings within root protection areas

Example protection fencing signage:



Drawing no: 6788/25/C **Rev:** - **Sheet number:** 1 of 1

Site:

Arches 29-41 Castle Mews
Castle Road
London
NW1 8SY

Drawing title: Tree Protection Plan

Date drawn: 27/02/202

Scale: 1:200 at A1

Drawn by: NH **Checked by:** PD

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Phlorum Limited

Head Office & Registered Office:
Unit 12
Hunns Mere Way
Woodingdean
Brighton
East Sussex
BN2 6AH
T: 01273 307 167

Western Office:
One Caspian Point
Pierhead Street
Cardiff Bay
Cardiff
CF10 4DQ
T: 029 2092 0820

info@phlorum.com
www.phlorum.com

Registered in England & Wales. Reg No. 4967256